

Private Sector Employer–Sponsored Health Insurance in Rhode Island:  
Results from the Insurance Component of the Medical Expenditure  
Panel Survey (MEPS-IC)

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## EXECUTIVE SUMMARY

This report provides information on employer-sponsored health insurance in private-sector establishments in the state of Rhode Island in 1997, 1999, 2001 and 2003. During this period, the private sector market was relatively stable with approximately 25,000 establishments and 400,000 employees in the workforce. Nearly two-thirds of these establishments had fewer than 10 employees, and in 2003, these small businesses employed approximately 72,000 individuals (17.5% of the private sector workforce). Approximately ten percent of private sector establishments had one thousand or more employees or were within firms which had 1,000 or more employees. In 2003, these largest establishments employed approximately 153,000 individuals (37.2% of the private sector workforce). Part-time employees comprised 20-30% of the private sector workforce.

Between 1997 and 1999 the percentage of private sector establishments which offered health insurance to its employees increased from 54% to 64%. This offer rate remained stable through 2003. Larger establishments and those paying higher wages were more likely to offer health insurance to their employees. Only 48% of the smallest establishments (<10 employees) offered health insurance to their employees in 2003; approximately 85% of full-time employees were eligible for this benefit and approximately 85% of these eligible employees enrolled in the employer-sponsored plan. Although nearly all private sector establishments with at least 100 employees offered health insurance, the eligibility pattern for the largest establishments was similar to the experience of the smallest establishments. The proportion of full-time employees who were eligible for employer sponsored health insurance declined from nearly 95% to approximately 85% among the largest establishments between 1997 and 2003. Unlike the smallest establishments, in which enrollment declined from approximately 94% in 1999 to 85% in 2003, the largest establishments experienced an increase in enrollment from under 80% to nearly 90% in 2003.

Several aspects of employer-sponsored health insurance have become more restrictive since 1997. Waiting periods are more common and coverage for retirees is less common. In 2003, close to 70% of all private sector establishments in Rhode Island that offered health insurance

required a waiting period to access this health insurance. Only ten percent of establishments provided health insurance to retirees. Managed care plans were offered by nearly 75% of establishments and just over 50% offered a preferred provider plan. Exclusive provider plans and conventional indemnity plans were offered by only 35% of establishments. Fewer than 30% of establishments offered two or more plans and 26% of establishments self-insured at least one plan.

Health insurance premiums (in 2003 dollars) paid by employers for individual coverage increased from 14% to 53% between 1997 and 2003. Largest firms paid the lowest premiums. The employee share of the premium for individual coverage increased dramatically for firms with fewer than 50 employees, but the resulting average premium payment for establishments in this group in 2003 was approximately \$100 lower than the average premium for establishments in firms with 50 or more employees (\$742 vs. \$858). Employer premiums for family coverage increased from 23% to 65% between 1997 and 2003. In 2003, the average total family premium per enrolled employee ranged from \$9,024 among the largest establishments (> 1000 employees) to \$10,325 among establishments in firms with 25-99 employees. Increases in the employee share of the premium for family coverage have been substantial for all businesses (28% to 177%, between 1997 and 2003), but particularly among small establishments.

The data presented in this report demonstrate the increasing financial burden of health insurance on private sector employers and employees. Although the proportion of private sector establishments which offer health insurance has remained relatively stable since 1999 at approximately 64%, there is a large difference in this offer rate by firm size. With only 48% of the smallest private sector establishments offering health insurance to their employees in 2003, programs targeting these businesses could have a substantial impact.

# TABLE OF CONTENTS

<b>Introduction.....</b>	<b>4</b>
<b>Technical Notes.....</b>	<b>4</b>
<b>Results</b>	
<b>I.    The Private Sector Market.....</b>	<b>9</b>
<b>II.   Private Sector Employees.....</b>	<b>10</b>
<b>III.  Health Insurance Access.....</b>	<b>14</b>
<b>IV.   Health Insurance Eligibility and Coverage.....</b>	<b>22</b>
<b>V.    Health Insurance Premiums and Employee Contributions.....</b>	<b>33</b>
<b>Appendix 1: Tables of Standard Errors.....</b>	<b>42</b>
<b>Appendix 2: Data for Selected Figures.....</b>	<b>49</b>

## INTRODUCTION

This report presents information on the market, employees and health insurance for private sector establishments in Rhode Island for the years 1997, 1999, 2001, and 2003 based upon the Medical Expenditure Panel Survey Insurance Component (MEPS-IC). Specifically, the report describes the size of the private sector market (Section I), the distribution of full and part-time employees within this market (Section II), health insurance access for employees within the private sector market (Section III), health insurance eligibility and coverage rules (Section IV) and premiums and employee contributions for health insurance (Section V).

## TECHNICAL NOTES

The Medical Expenditure Panel Survey Insurance Component (MEPS-IC) is an annual survey of private sector and government establishments that collects information about employer-sponsored health insurance offerings in the United States. The survey, sponsored by the Agency for Healthcare Research and Quality (AHRQ), was implemented in 1996 in the 40 most populous states. In 1997, the smallest 20 States were rotated into the sampling frame and surveyed biannually. Information for RI is available for 1997, 1999, 2001, and 2003. The official summary of sample design and methodology, including a discussion of standard errors and significance testing, may be accessed at <http://www.meps.ahrq.gov/MEPSDATA/ic/2003/technote.htm>.

### *Definitions of Terms in this Report*

- **Establishment** -- a particular workplace or physical location where business is conducted or services or industrial operations are performed. Private establishments are all non-government establishments.
- **Exclusive plan provider** – a plan in which the covered persons must go to providers associated with the plan for all non-emergency care in order for costs to be covered. Most health maintenance organizations (HMOs), individual practice associations (IPAs), and exclusive provider organizations (EPOs) are exclusive-provider plans.

- **Family coverage** – a health plan that covers the enrollee and one or more family members as defined by the plan. If more than one family rate was offered, the costs for a family of four were collected.
- **Firm --** a business with a separate management and legal structure, also referred to as an enterprise. A firm represents the entire organization, including the company headquarters and all divisions, subsidiaries and branches within the company family. A firm may consist of a single establishment or multiple establishments. In the case of a single-establishment firm, the firm and establishment are identical. Firm size includes the total number of employees in the entire firm, not just those within the State if it is a multi-state firm.
- **Indemnity plan (Any provider plan or fee-for-service plan)** – a plan that allows the enrollee to use any provider with no cost incentives to use a particular subset of providers.
- **Managed care plan** – either a mixed provider or exclusive provider plan.
- **Preferred provider plan (Mixed provider plan)** – a plan that allows the enrollee to use any provider but has a cost incentive to use a particular subset of providers.
- **Self-insured plan** – a plan in which the financial risk for medical claims is borne partially or entirely by the employer.
- **Single coverage** – a health insurance plan that covers an individual only.
- **Wage quartiles --** Four groups of private-sector establishments, each containing 25% of the total U.S. employment. Establishments in the lowest of the four quartiles (1st quartile) have lower average payrolls per employee (compensation excluding fringe benefits) than any establishment in the 2nd quartile. Establishments in the 2nd quartile have lower average payrolls than any establishment in the 3rd quartile, and establishments in the 4th (or highest) quartile have average payrolls greater than any establishment in the other three quartiles.

### *Sample Information*

Estimates presented in this report are derived from a stratified random sample of private-sector business establishments in Rhode Island. These establishments employ at least one person in addition to the owner. Private sector establishments were sampled within 14 strata based on establishment size and the size of the firm to which the establishment belonged. Table i shows the number of establishments sampled in Rhode Island by firm size for each year used in this report. Table ii shows the number of establishments that responded to the survey, with resultant response rates provided in parentheses. Sample weights are applied to compute final estimates (i.e., MEPS-IC results) which represent all establishments in Rhode Island.

**Table i. Number of Sampled Establishments in Rhode Island**

	<b>1997</b>	<b>1999</b>	<b>2001</b>	<b>2003</b>
<b>Firm size</b>				
Less than 50	545	473	484	524
50 to 1000	133	168	153	113
More than 1000	88	99	116	87
Total	766	740	753	724

**Table ii. Number of Responding Establishments in Rhode Island and Corresponding Response Rates**

	<b>1997</b>	<b>1999</b>	<b>2001</b>	<b>2003</b>
<b>Firm size</b>				
Less than 50	367 (67.3%)	358 (75.7%)	315 (65.1%)	391 (74.6%)
50 to 1000	93 (69.9%)	128 (76.2%)	104 (68.0%)	101 (89.4%)
More than 1000	65 (73.9%)	83 (83.8%)	82 (70.7%)	75 (86.2%)
Total	525 (68.5%)	569 (76.9%)	501 (66.5%)	567 (78.3%)

Nationwide, the response rate for the MEPS-IC survey runs in the low to mid-70% range. This translates to a sample of approximately 550 to 600 establishments in those States for which estimates are made. As is evident in Table ii, the Rhode Island sample and response rates are within this range. (*Frequently Asked General Questions*. July 2005. Agency for Healthcare Research

and Quality, Rockville, MD. [http://www.meps.ahrq.gov/faqs/faq\\_ic.htm](http://www.meps.ahrq.gov/faqs/faq_ic.htm)). In Rhode Island, among responding establishments (see Table ii), 65% offered health insurance in 1997, 72% in 1999, 73% in 2001 and 63% in 2003.

### *Premium Adjustments*

To allow for comparisons over time, all dollar amounts presented in this report were adjusted to reflect 2003 dollars. The adjustment was based on medical care services, Series CUUR0000SAM2 of the Consumer Price Index for all Urban Consumers provided by the U.S. Bureau of Labor Statistics. For more information, see [www.bls.gov/cpi](http://www.bls.gov/cpi).

### *Statistical Significance of Differences within and between Firm Sizes*

The majority of statistical comparisons made throughout this report are comparisons within firm size groups over time. For example, the percentage of private sector establishments which offer health insurance in firms with 10 or fewer people for 1997 is compared to the percentage of private sector establishments in firms with 10 or fewer people in 1999, 2001, and 2003; and findings which are significantly different are reported. P-values are reported for significant differences. Within any particular year, the statistical significance of differences between firm sizes (e.g. whether percent offering health insurance in small firms is significantly different than the percent in large firms), can be determined by calculating a z-score as follows.

$$z = (\text{Estimate}_1 - \text{Estimate}_2) / \text{SQRT}(\text{S.E.}_1^2 + \text{S.E.}_2^2)$$

SQRT = square root and

S.E.= standard error (See Appendix 2)

Using a two-tailed test, a z-score of 1.96 or greater indicates a significant difference between the estimates at  $p < .05$ . Estimates are reported directly in the figures and tables and corresponding standard errors are provided in Appendix 2.

### *Limitations*

There are a number of limitations inherent in using the MEPS-IC that should be noted. First, because data are aggregated prior to release, individual establishments cannot be followed over time. For the same reason, we cannot alter firm-size groupings. In some instances sample size



limitations result in excessively large standard errors, making estimates unreliable. Standard errors greater than 30% of the estimate are noted in the tables and figures. In addition, all of the standard errors for each table and figure are provided in the appendix.

## I. THE PRIVATE SECTOR MARKET

- The number of private sector establishments in RI remained stable at approximately 25,000 between 1997 and 2003.
- Approximately two-thirds of these establishments had fewer than 10 employees and approximately 10% had 1,000 or more employees or were within firms which had 1,000 or more employees nationwide.

**Table 1**

There Was Little Change in the Overall Distribution of Establishments in RI by Firm Size Between 1997 and 2003

Firm Size	Number of Establishments			
	1997	1999	2001	2003
<10	17324	15699	16028	16257
10-24	2929	3413	3235	2970
25-99	1978	1858	1788	1855
100-999	1054	1366	1341	1519
1000+	2592	2142	3098	2639
<b>Total</b>	<b>25,878</b>	<b>24,477</b>	<b>25,491</b>	<b>25,240</b>

Source: MEPS-IC Component

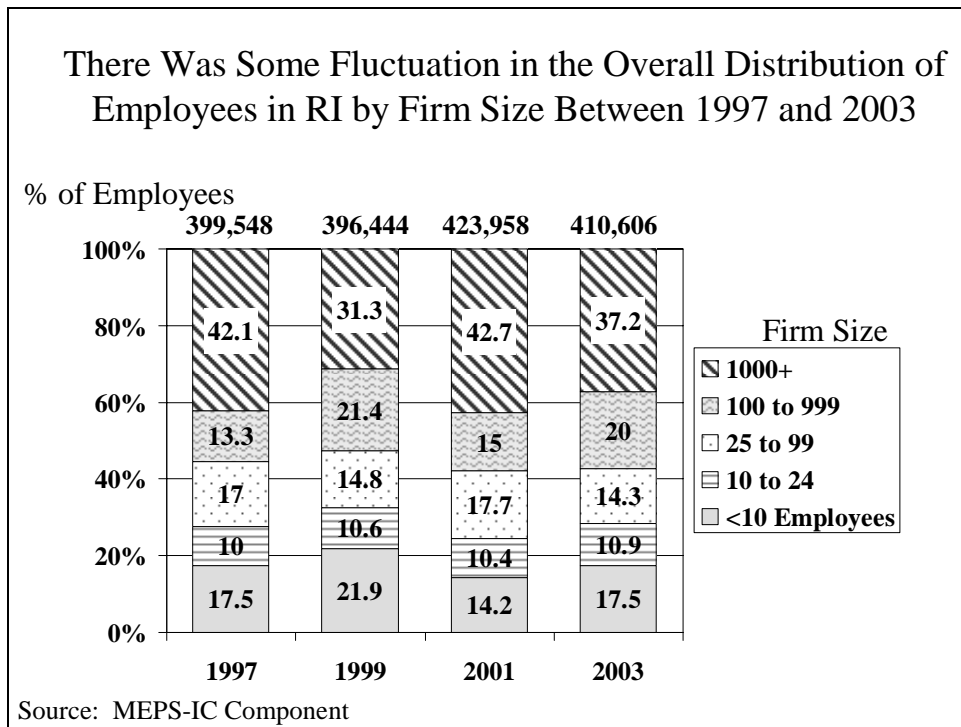
## II. PRIVATE SECTOR EMPLOYEES

In this section, we examine the distribution of full and part-time employees in Rhode Island by firm size.

Key findings:

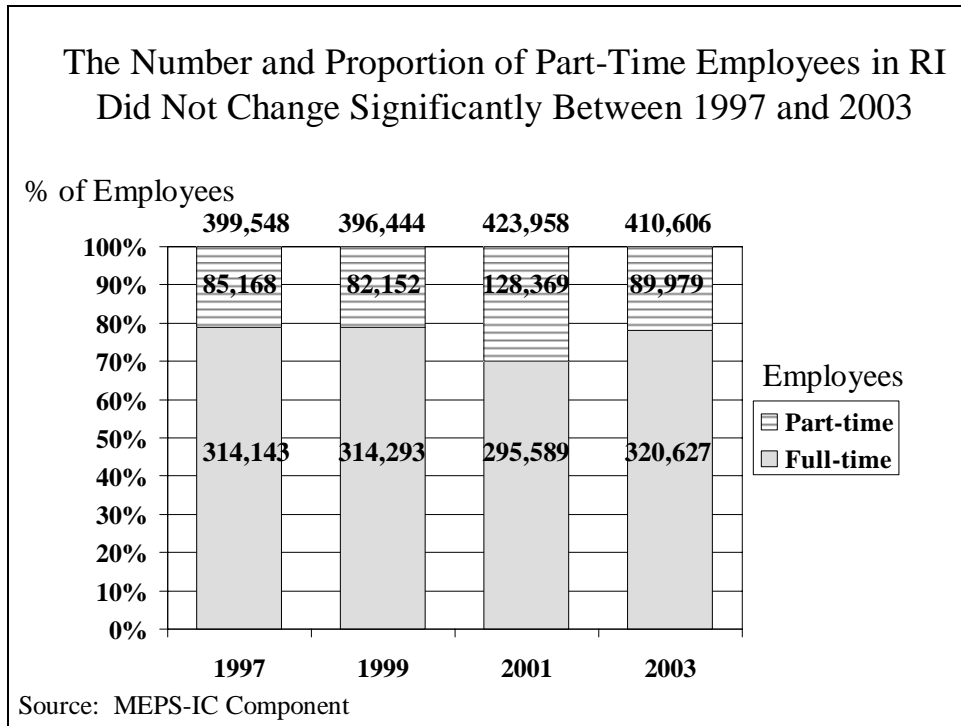
- Over one-half of the private sector workforce was employed at firms with at least 100 employees between 1997 and 2003 (Figure 1). Approximately 15% of establishments in Rhode Island are in this firm size category.
- Between one-quarter and one-third of the private sector workforce was employed at firms with fewer than 25 employees (Figure 1). Approximately 75% of establishments in Rhode Island are in this firm size category.
- The overall number of private sector employees remained stable between 1997 and 2003 (Figure 2).
- The number of part-time employees increased from approximately 82,000 in 1999 to 128,000 in 2001 ( $p=.040$ ). This increase was not sustained in 2003 (Figure 2).
- Firms with fewer than 10 employees experienced a decline in the number of part-time employees ( $p=.028$ ) in 1999 to approximately 14,000, but returned to 1997 levels by 2001 (Figure 3) and increased in 2003.

**Figure 1**



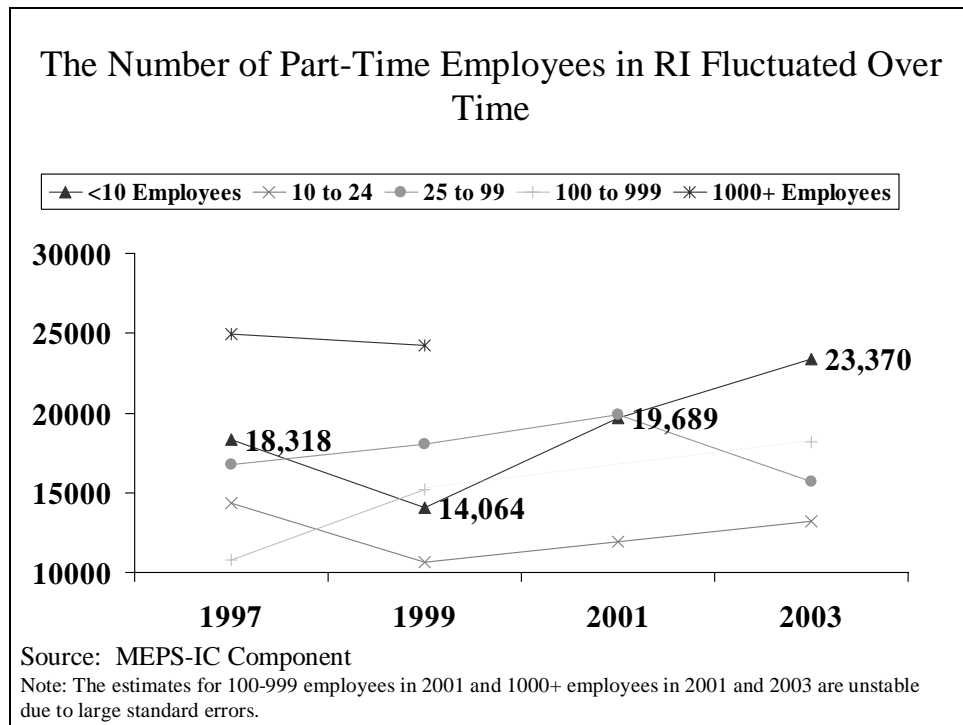
- Over one-half of the private sector workforce was employed at firms with at least 100 employees between 1997 and 2003. Approximately 15% of establishments in Rhode Island are in this firm size category.
- Between one-quarter and one-third of the private sector workforce was employed at firms with fewer than 25 employees. Approximately 75% of establishments in Rhode Island are in this firm size category.

**Figure 2**



- The overall number of private sector employees remained stable between 1997 and 2003.
- The number of part-time employees increased from approximately 82,000 in 1999 to 128,000 in 2001 ( $p=.040$ ). This increase was not sustained in 2003.

**Figure 3**



- Firms with fewer than 10 employees experienced a decline in the number of part-time employees ( $p=.028$ ) in 1999 to approximately 14,000, but returned to 1997 levels by 2001 and increased in 2003.

### III. HEALTH INSURANCE ACCESS

In this section we examine access to health insurance for employees of private sector establishments. Health Insurance offer rates, eligibility rates and enrollments rates are presented by firm size.

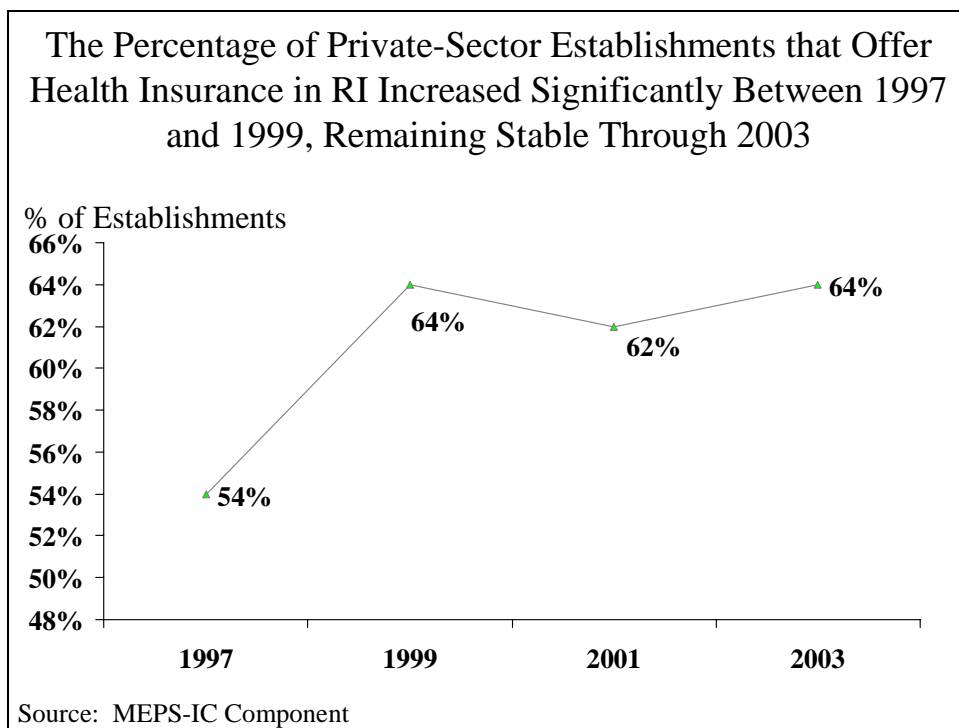
Key findings:

- In 2003, 64% of private sector establishments offered health insurance to its employees. Between 1997 and 1999 the percentage of private sector establishments offering health insurance to their employees increased significantly ( $p=.021$ ) from 54% to 64%. This rate remained stable through 2003 (Figure 4).
- Establishments paying higher wages were more likely to offer health insurance. In 2003, only 38.7% of establishments in the lowest wage quartile offered health insurance to their employees, compared to 96.6% of establishments in the highest quartile (Table 2).
- Nearly all private sector establishments in firms with at least 100 employees and approximately 90% of private sector establishments in firms with 25-99 employees offer health insurance to their employees (Figure 5).
- Between 1997 and 1999 there was a significant increase (from 37% to 52%;  $p=.046$ ) in the proportion of private sector establishments with fewer than 10 employees which offered health insurance to their employees. The offer rate for this firm size leveled off after 1999. In 2003, 48% of private sector establishments with fewer than 10 employees offered health insurance to their employees (Figure 5).
- Between 1997 and 1999 there was a corresponding significant increase (from 60% to 80%;  $p=.003$ ) in the proportion of full-time employees who were working in private sector establishments in firms which had fewer than 10 employees and which offered health insurance. This percentage leveled off at approximately 70% after 1999 (Figure 6).
- In 2003, very small (fewer than 10 employees) private sector establishments which offered health insurance had a workforce composed of approximately 70% full-time and 30% part-time employees (Figure 6).

- Among full-time employees who worked in the largest establishments (1,000+ employees) which offered health insurance, the percentage who were eligible for health insurance decreased (from 94% to 85%;  $p=.044$ ) between 1997 and 2003 (Figure 7).
- Among full-time employees who were eligible for health insurance, the proportion who enrolled in employer-sponsored health insurance decreased ( $p=.044$ ) from approximately 94% in 1999 to approximately 85% in 2003 among the smallest establishments (Figure 8).
- Comparable enrollment rates in 2003 were observed only for establishments in the largest firms (1,000+ employees). Contrary to the smallest establishments, these enrollment rates increased significantly ( $p=.027$ ) from 2001 (Figure 8).



**Figure 4**



- In 2003, 64% of private sector establishments offered health insurance to its employees. Between 1997 and 1999 the percentage of private sector establishments offering health insurance to their employees increased significantly ( $p=.021$ ) from 54% to 64%. This rate remained stable through 2003.

**Table 2**

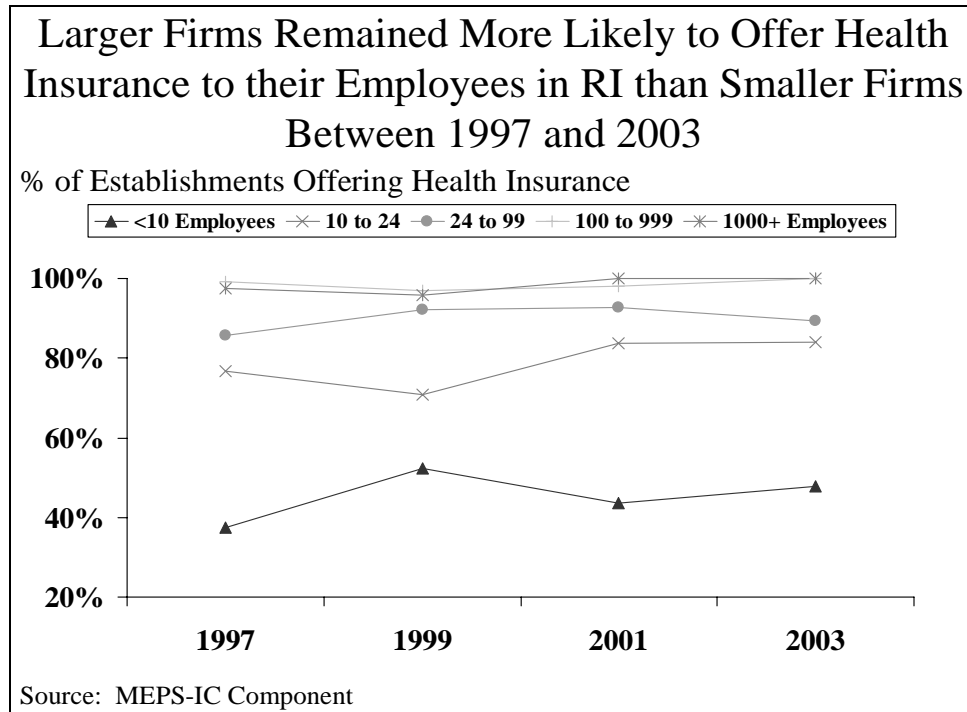
Percent of Establishments Offering Health Insurance in RI by  
Wage Quartile Between 2001 and 2003

<b>Wage Quartile</b>	<b>2001</b>	<b>2003</b>
First	36.1 %	38.7 %
Second	63.2 %	69.7 %
Third	78.6 %	76.2 %
Fourth	88.7 %	96.6 %
<b>Total</b>	62.0 %	63.6 %

Source: MEPS-IC Component

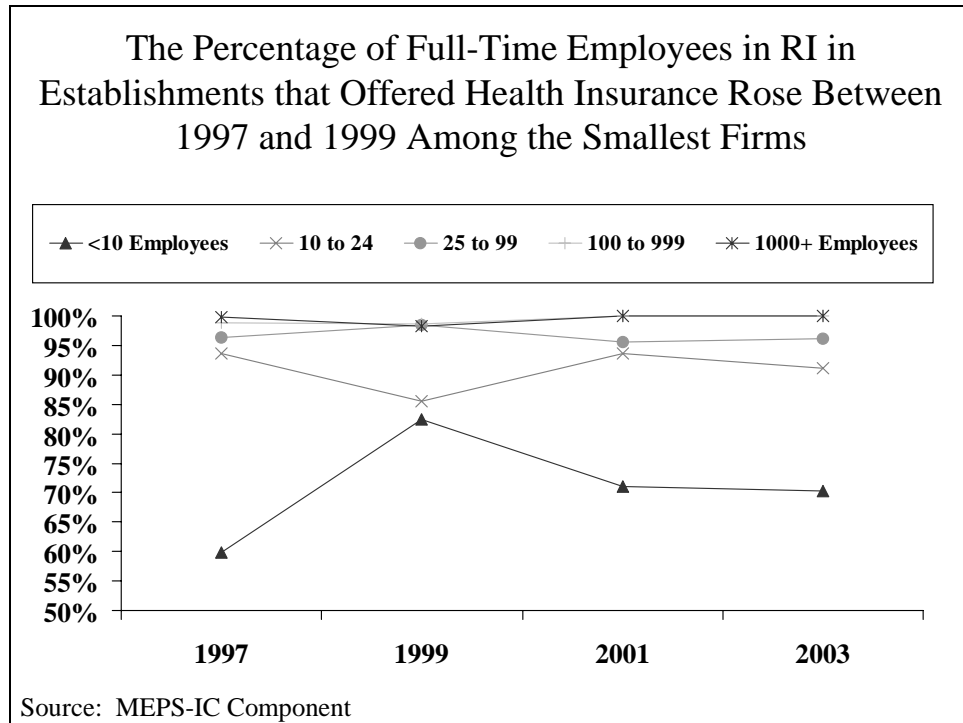
- Establishments paying higher wages were more likely to offer health insurance. In 2003, only 38.7% of establishments in the lowest wage quartile offered health insurance to their employees, compared to 96.6% of establishments in the highest quartile.

**Figure 5**



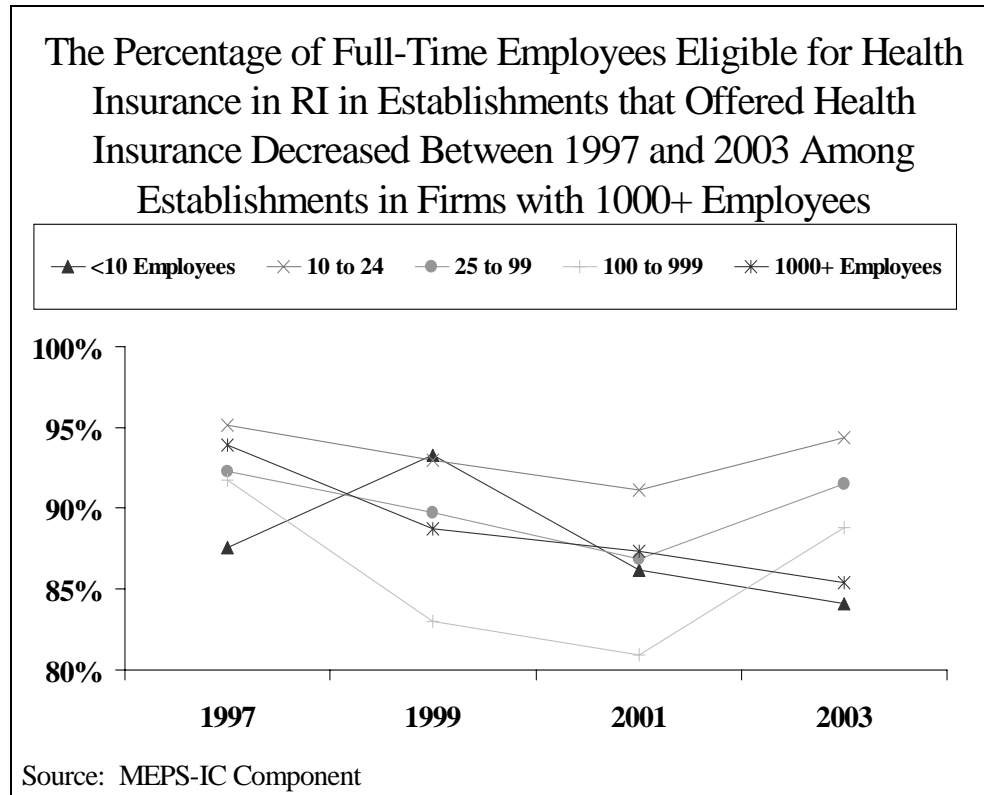
- Nearly all private sector establishments in firms with at least 100 employees and approximately 90% of private sector establishments in firms with 25-99 employees offer health insurance to their employees.
- Between 1997 and 1999 there was a significant increase (from 37% to 52%;  $p=.046$ ) in the proportion of private sector establishments with fewer than 10 employees which offered health insurance to their employees. The offer rate for this firm size leveled off after 1999. In 2003, 48% of private sector establishments with fewer than 10 employees offered health insurance to their employees.

**Figure 6**



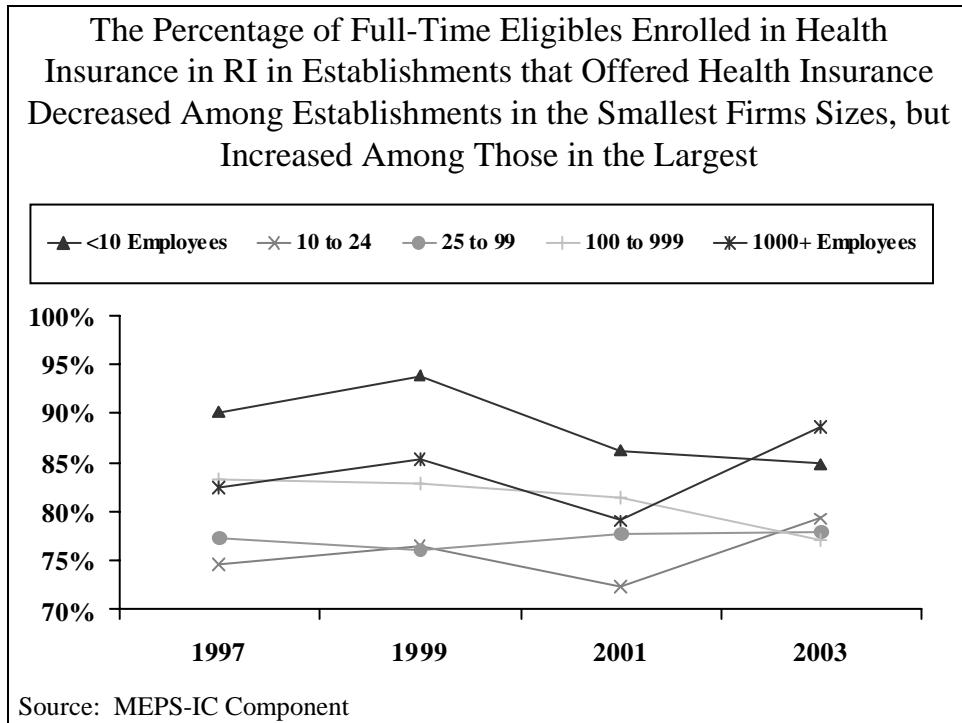
- Between 1997 and 1999 there was a corresponding significant increase (from 60% to 80%;  $p=.003$ ) in the proportion of full-time employees who were working in private sector establishments in firms which had fewer than 10 employees and which offered health insurance. This percentage leveled off at approximately 70% after 1999.
- In 2003, very small (fewer than 10 employees) private sector establishments which offered health insurance had a workforce composed of approximately 70% full-time and 30% part-time employees.

**Figure 7**



- Among full-time employees who worked in the largest establishments (1,000+ employees) which offered health insurance, the percentage who were eligible for health insurance decreased (from 94% to 85%;  $p=.044$ ) between 1997 and 2003.

**Figure 8**



- Among full-time employees who were eligible for health insurance, the proportion who enrolled in employer-sponsored health insurance decreased ( $p=.044$ ) from approximately 94% in 1999 to approximately 85% in 2003 among the smallest establishments.
- Comparable enrollment rates in 2003 were observed only for establishments in the largest firms (1,000+ employees). Contrary to the smallest establishments, these enrollment rates increased significantly ( $p=.027$ ) from 2001.

## IV. HEALTH INSURANCE ELIGIBILITY AND COVERAGE

In this section we focus on those establishments which offer health insurance. We examine the following aspects of this coverage: a waiting period, health insurance for retirees, preferred provider plan, exclusive provider plan, managed care plan, conventional indemnity plan, two or more plans, and self-insurance.

In 2003, close to 70% of all private sector establishments in Rhode Island that offered health insurance required a waiting period to access this health insurance (Figure 9). Only ten percent of establishments provided health insurance to retirees (Figures 10 and 10a). Managed care plans were offered by nearly 75% of establishments (Figure 11) and just over 50% offered a preferred provider plan (Figure 12). Exclusive provider plans (Figure 13) and conventional indemnity plans (Figure 14) were offered by only 35% of establishments. Fewer than 30% of establishments offered two or more plans (Figures 15 and 15a) and 26% of establishments self-insured at least one plan (Figures 16 and 16a).

### Key Changes Over this Time Period:

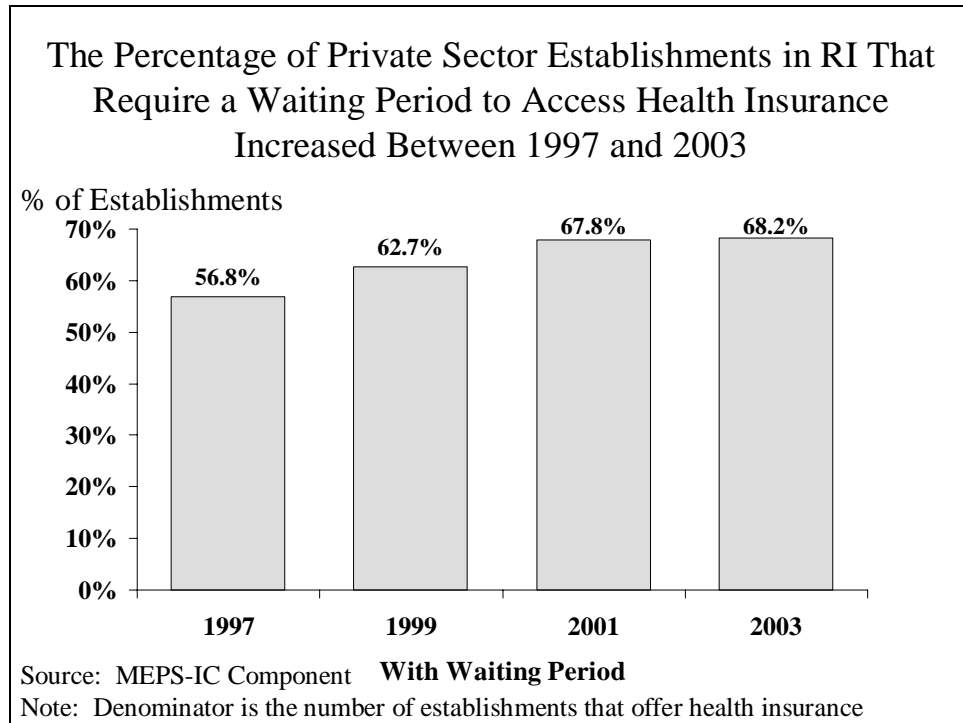
Among establishments that offered health insurance,

- Overall, the percentage of establishments that required a waiting period before employees were eligible for health insurance increased ( $p=.023$ ) between 1997 and 2003 (Figure 9).
- Between 2001 and 2003, the percentage of establishments that required a waiting period decreased ( $p=.082$ ) among larger firms (Figure 9a).
- The percentage of establishments that offered health insurance to retirees decreased between 1997 and 1999 ( $p<.05$ ) and remained stable through 2003 at approximately 10% (Figures 10 and 10a).
- The percentage of establishments that offered a managed care plan remained stable over time (Figure 11).
- Following an increase between 1997 and 1999 ( $p=.049$ ), the percentage of establishments that offered a preferred provider plan remained relatively stable over time (Figure 12).

- The percentage of establishments that offered an exclusive provider plan decreased ( $p=.023$ ) between 2001 and 2003 (Figure 13).
- The percentage of establishments that offered an indemnity plan decreased from 1997-2001 ( $p=.015$ ), but returned to 1997 levels in 2003 (Figure 14).
- Larger firms (with 50 or more employees) were more likely than smaller firms (with fewer than 50 employees) to offer two or more plans (Figure 15a).
- Although there was no significant change in the percentage of all establishments that offered two or more plans between 1997 and 2003, there was a significant decrease ( $p=.023$ ) between 1997 and 2003 for establishments in smaller firms (Figures 15 and 15a).
- Larger firms were more likely than smaller firms to self-insure at least one plan. The percentage of establishments that self-insured decreased ( $p=.005$ ) between 1997 and 1999, particularly among establishments in smaller firms. Among larger firms, pre-1999 self-insurance levels returned in 2003 (Figures 16 and 16a).

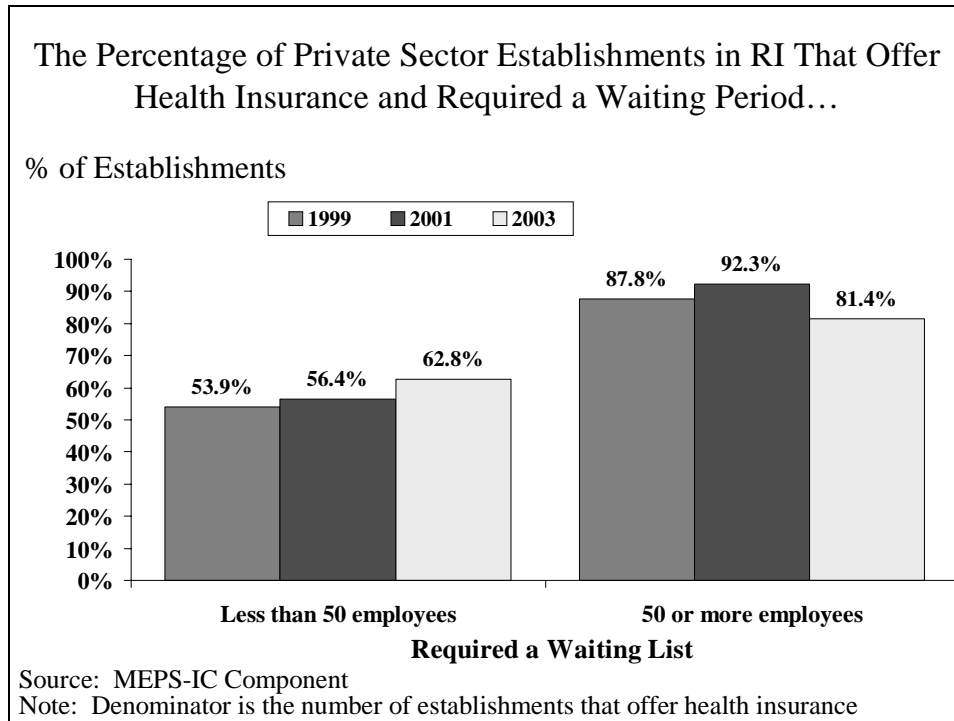


Figure 9



- The percentage of establishments that require a waiting period before employees were eligible for health insurance increased between 1997 and 2003 ( $p < .05$ ).

Table 9a



- Between 2001 and 2003, the percentage of establishments that required a waiting period decreased ( $p=.082$ ) among larger firms.

Figure 10

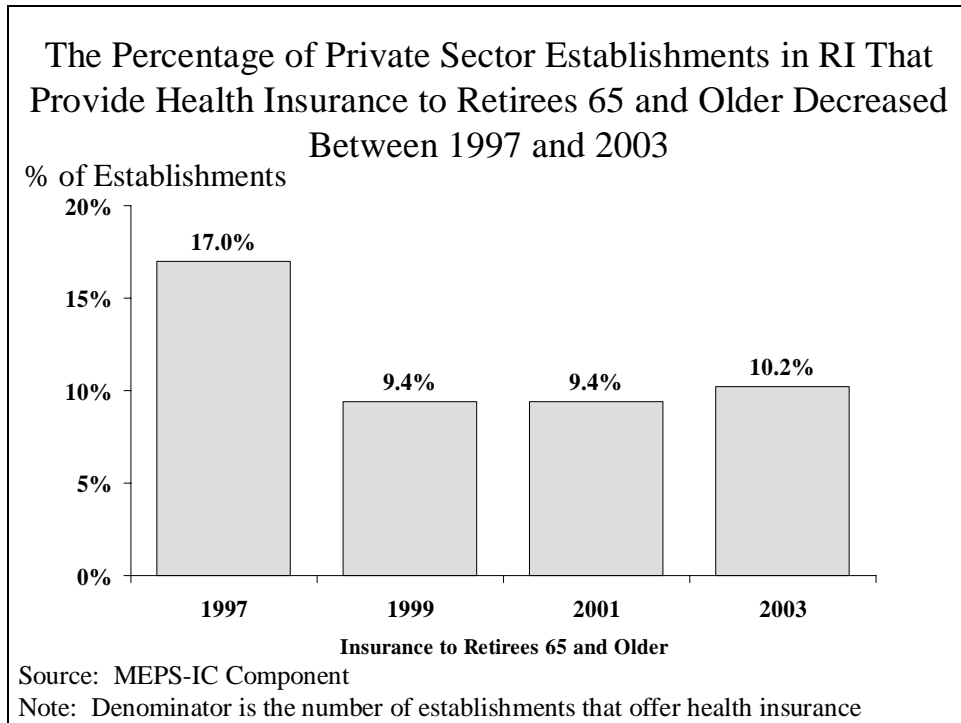
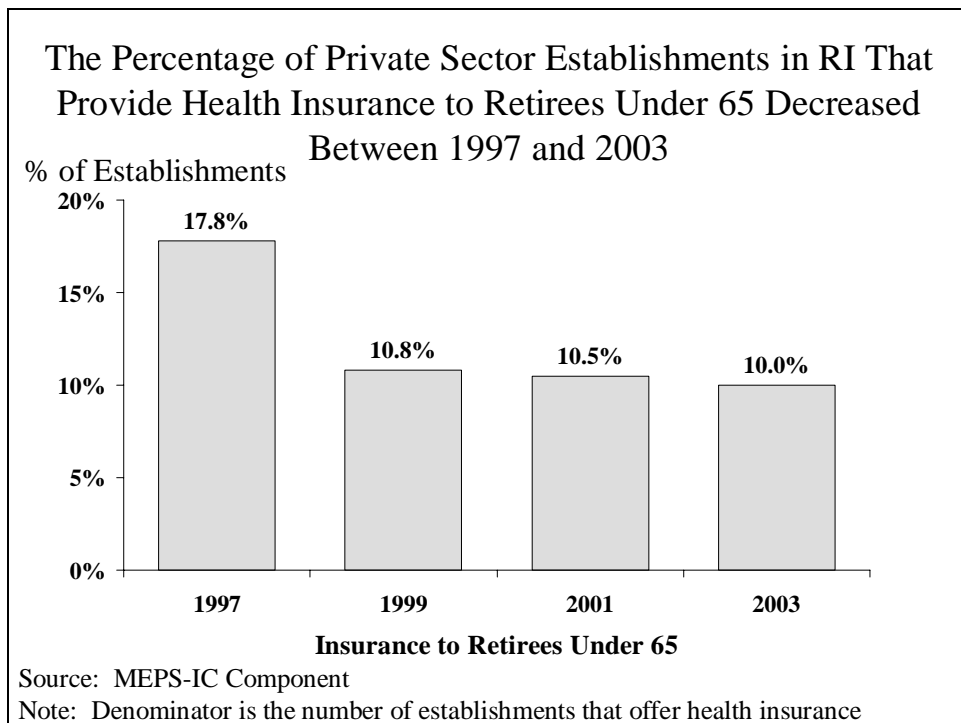
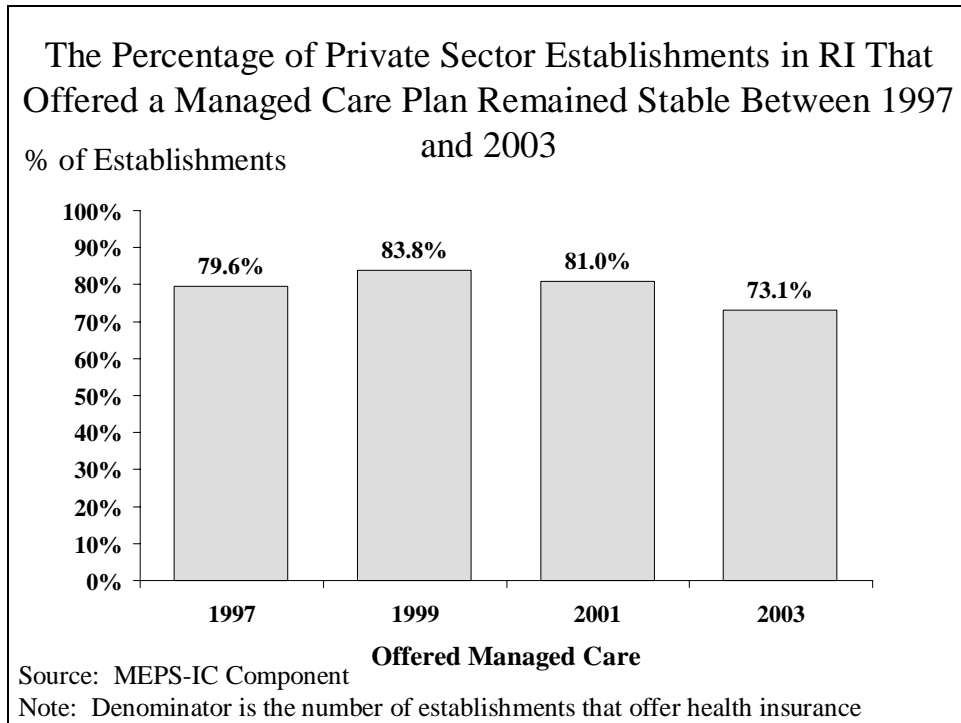


Figure 10a



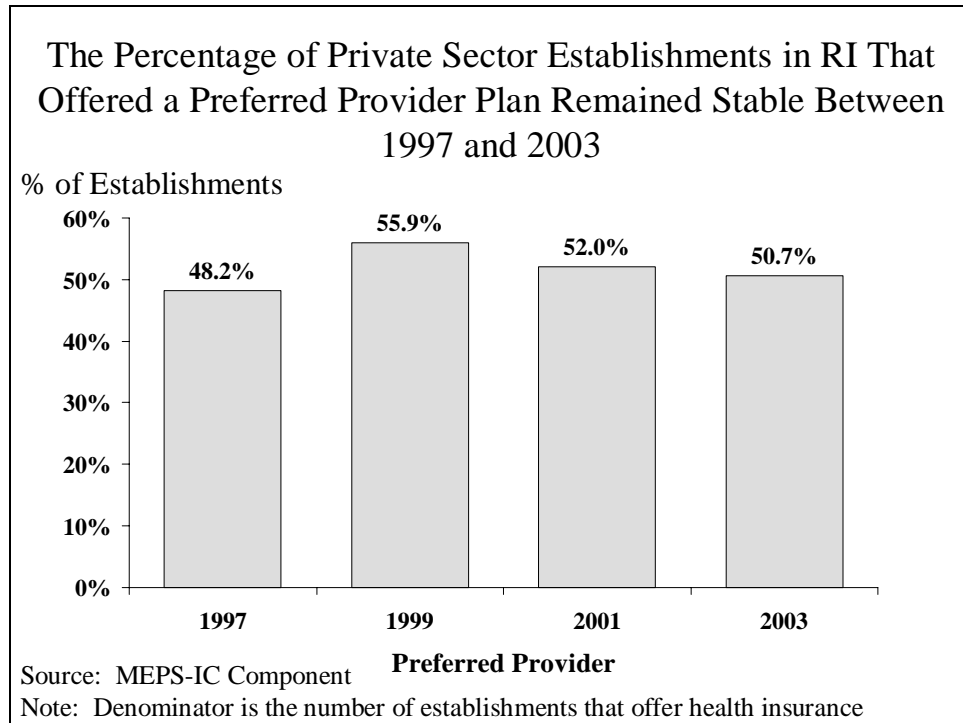
- The percentage of establishments that offered health insurance to retirees decreased from 1997 and 1999 ( $p < .05$ ) to 10% and remained stable through 2003.

Figure 11



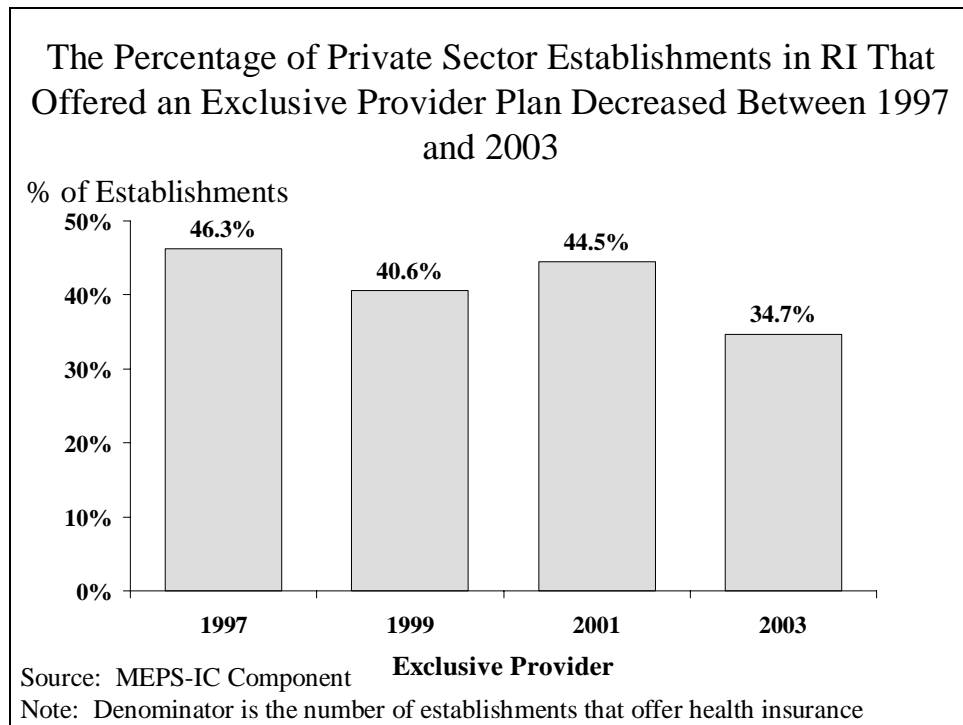
- The percentage of establishments that offered a managed care plan remained stable over time.

Figure 12



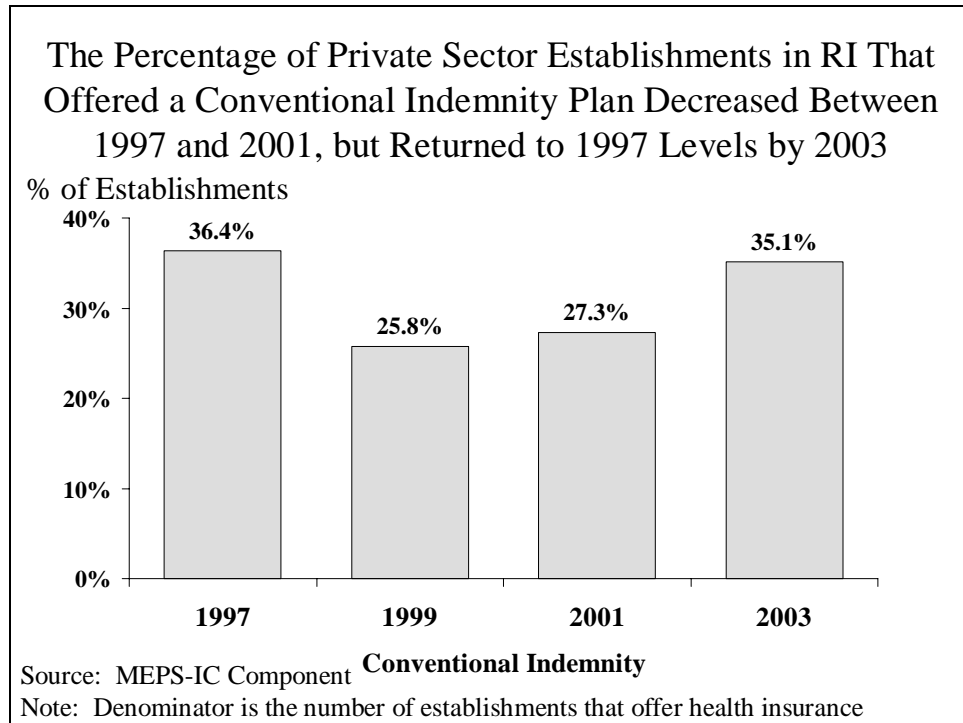
- Following an increase between 1997 and 1999 ( $p=.049$ ), the percentage of establishments that offered a preferred provider plan remained relatively stable over time.

Figure 13



- The percentage of establishments that offered an exclusive provider plan decreased ( $p=.023$ ) between 2001 and 2003.

Figure 14



- The percentage of establishments that offered an indemnity plan decreased from 1997-2001 ( $p=.015$ ), but returned to 1997 levels in 2003.

Figure 15

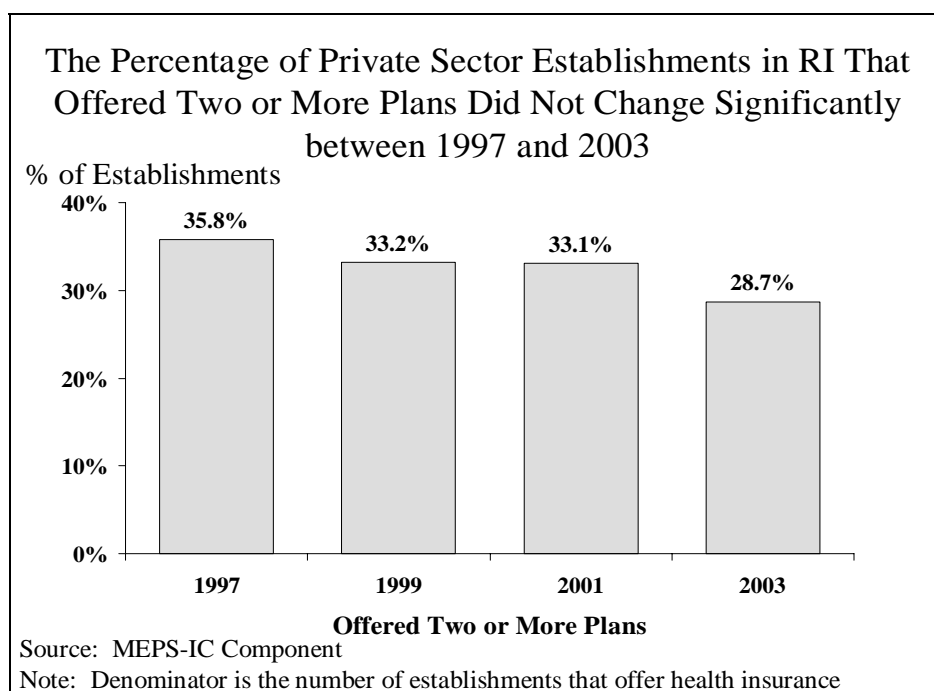
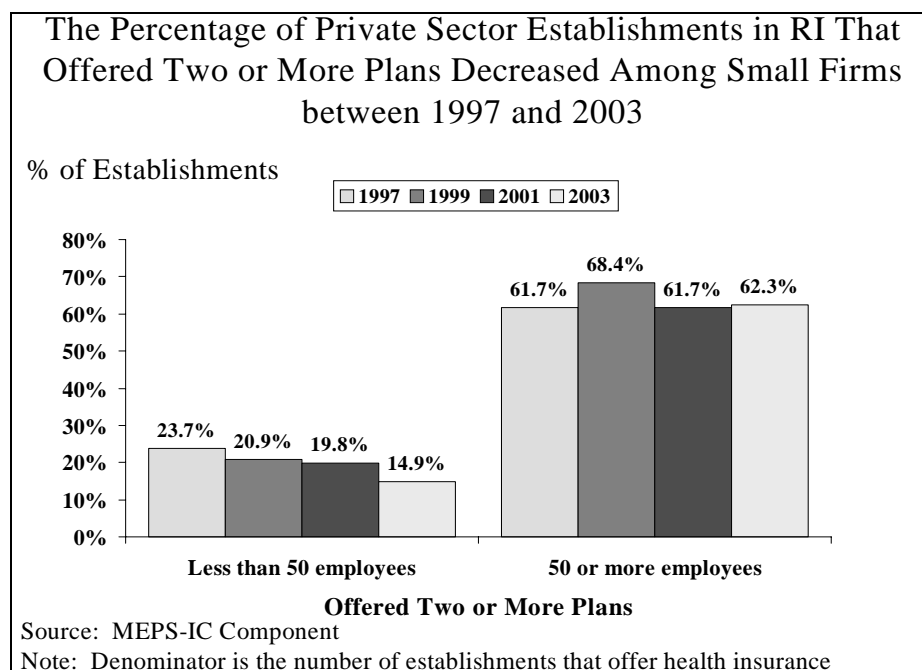


Figure 15a



- Larger firms (with 50 or more employees) were more likely than smaller firms (with fewer than 50 employees) to offer two or more plans.
- Although there was no significant change in the percentage of all establishments that offered two or more plans between 1997 and 2003, there was a significant decrease ( $p=.023$ ) between 1997 and 2003 for establishments in smaller firms.



Figure 16

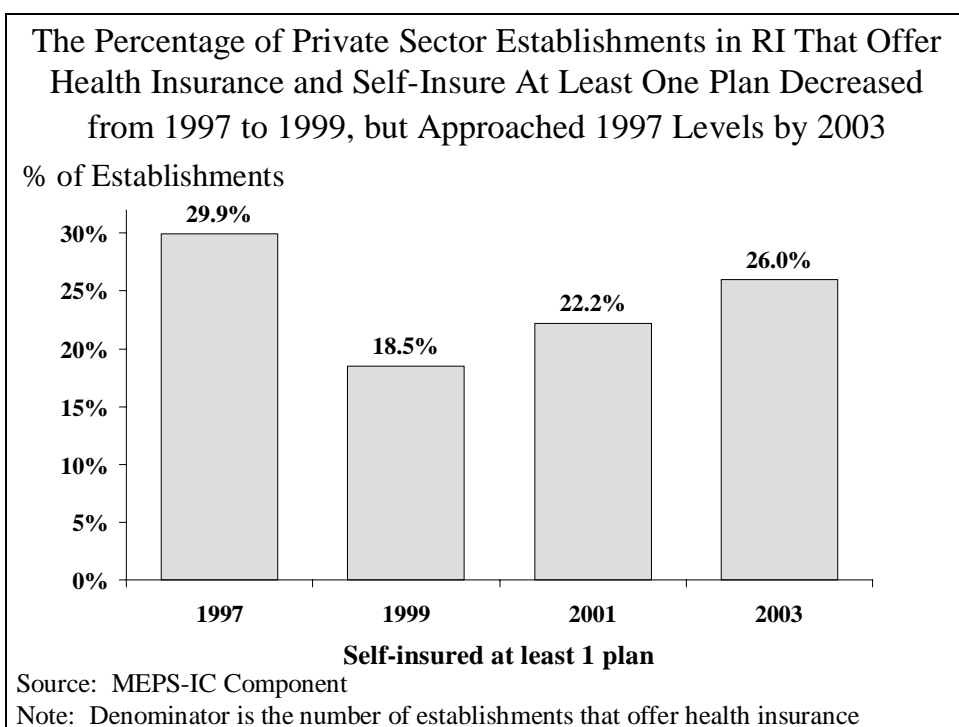
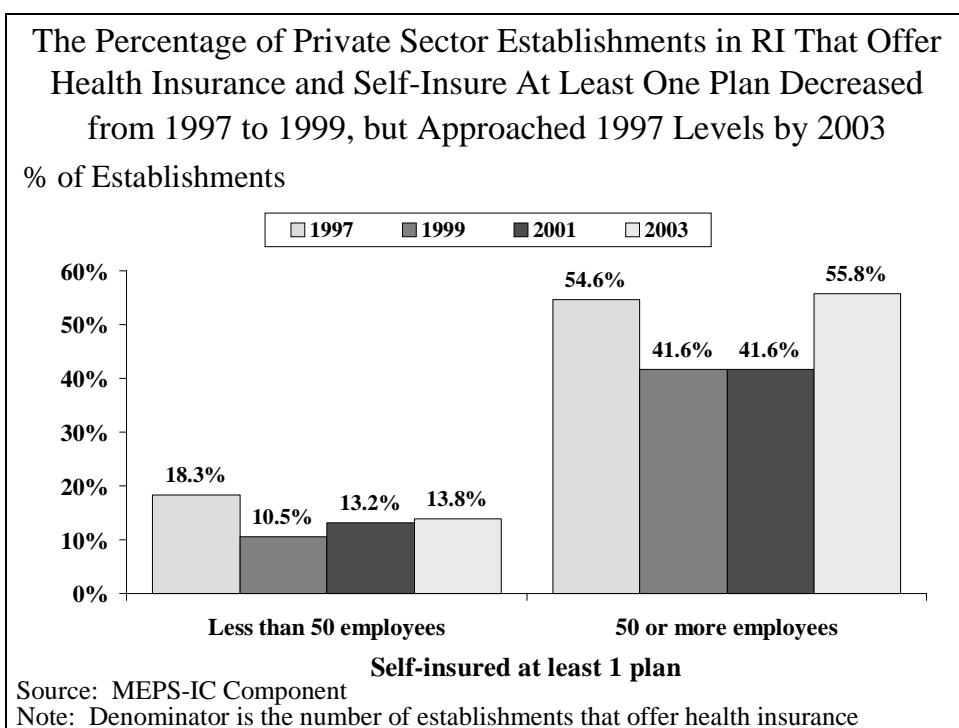


Figure 16a



- Larger firms were more likely than smaller firms to self-insure at least one plan. The percentage of establishments that self-insured decreased ( $p=.005$ ) between 1997 and 1999, particularly among smaller firms. Among larger firms, pre-1999 self-insurance levels returned in 2003.

## V. PREMIUMS AND EMPLOYEE CONTRIBUTIONS

In this section, we examine the total premium cost per enrolled employee as well as the average employee contributions for both single and family coverage. All dollar amounts have been adjusted to reflect 2003 dollars<sup>1</sup>.

### Key findings:

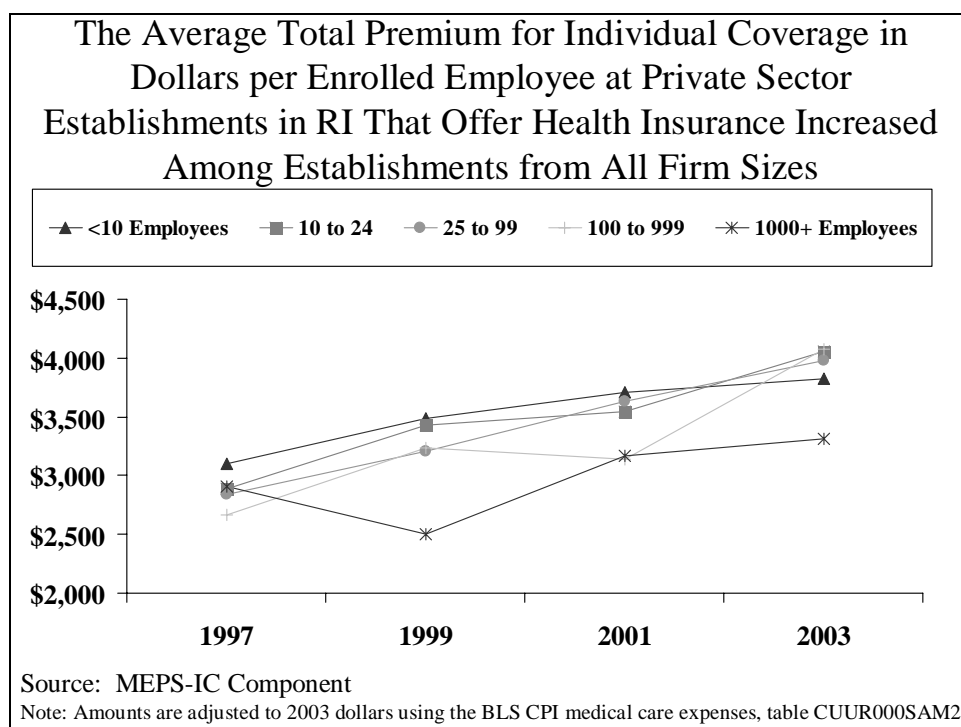
- Largest firms paid the lowest premiums in general and the average total premium for individual coverage per enrolled employee in firms of all sizes rose significantly between 1997 and 2003 ( $p < .01$ ) (Figure 17).
- The smallest increase in the average premium for individual coverage was 14%, from \$2,912 to \$3,315, among establishments in firms with 1000+ employees (Figure 17).
- The largest increase was 53%, from \$2,670 to \$4,076, among establishments in firms with 100 to 999 employees (Figure 17).
- The largest differential between highest and lowest premium was observed in 1999 for the largest and smallest firms. The differential narrowed for all firms in 2001 and premiums in mid-range firms exceeded premiums in the smallest and largest firms in 2003 (Figure 17).
- The total premium paid by employees for single coverage increased dramatically for firms with fewer than 50 employees, but the resulting average premium payment for establishments in this group in 2003 was approximately \$100 lower than the average premium for establishments in firms with 50 or more employees (Table 3).
- Average employee contributions toward individual coverage have increased since 1997 and in 2003 were in the 10-30% range (Figure 18).
- In 2003, employees in firms with 25-99 employees paid the highest percentage of the premium for individual coverage (Figure 18).
- With minimal exception, the average total family premium per enrolled employee at private sector establishments rose significantly within each firm size between 1997 and 2003 ( $p < .01$ ) (Figure 19).

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<sup>1</sup> Dollar amounts have been adjusted to 2003 dollars using the Consumer Price Index, Medical Care Services, Table CUUR0000SAM2 from the Bureau of Labor Statistics (Bureau of Labor Statistics, 2005).

- These increases ranged from 23%, from \$7,347 to \$9,024, among establishments in firms with 1000 or more employees to 65%, from \$6,275 to \$10,325 among establishments in firms with 25-99 employees (Figure 19).
- Employee contributions for family coverage have increased dramatically for smaller firms (Table 4).
- The employee premium contribution for family coverage in establishments in firms with 100 to 999 employees decreased significantly between 1997 and 2001 from \$1,941 to \$1,166 ( $p < .05$ ), but rose significantly again between 2001 and 2003 to \$2,481 ( $p < .01$ ) (Table 4).
- Since 2001, employees in smaller firms have paid a slightly higher percentage of the premium for family coverage than employees in larger firms (Figure 20).

Figure 17



- Largest firms paid the lowest premiums in general and the average total premium for individual coverage per enrolled employee in firms of all sizes rose significantly between 1997 and 2003 ( $p < .01$ ).
- The smallest increase in the average premium for individual coverage was 14%, from \$2,912 to \$3,315, among establishments in firms with 1000+ employees
- The largest increase was 53%, from \$2,670 to \$4,076, among establishments in firms with 100 to 999 employees.
- The largest differential between highest and lowest premium was observed in 1999 for the largest and smallest firms. The differential narrowed for all firms in 2001 and premiums in mid-range firms exceeded premiums in the smallest and largest firms in 2003.

Table 3

**The Average Total Employee Contribution for Individual Coverage in Dollars per Enrolled Employee Increased Between 1997 and 2003 at Private Sector Establishments in RI**

<b>Firm Size</b>	<b>1997</b>	<b>1999</b>	<b>2001</b>	<b>2003</b>	<b>% Increase between 1997-2003</b>
<10	\$250*	\$321*	\$668	\$ 527	unstable
10-24	\$299*	\$251*	\$584*	\$ 1,297	unstable
25-99	\$474	\$654	\$722	\$ 872	84%
100-999	\$468	\$582	\$300	\$ 822	75%
1000+	\$555	\$579	\$716	\$ 781	41%
<50	\$333	\$398	\$690	\$742	123%
≥50	\$521	\$576	\$589	\$858	65%

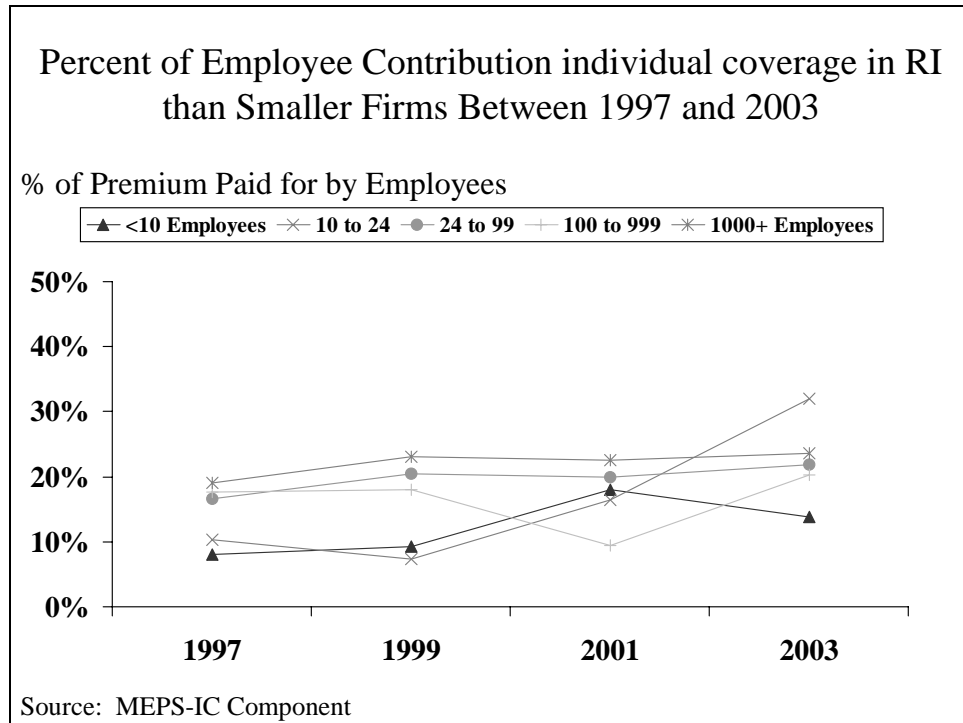
Source: MEPS-IC Component

Notes: \*The estimates for <10 employees in 1997, 1999, 10-24 employees in 1997, 1999, 2001 are unstable due to large standard errors.

Amounts are adjusted to 2003 dollars using the BLS CPI medical care expenses, table CUUR000SAM2

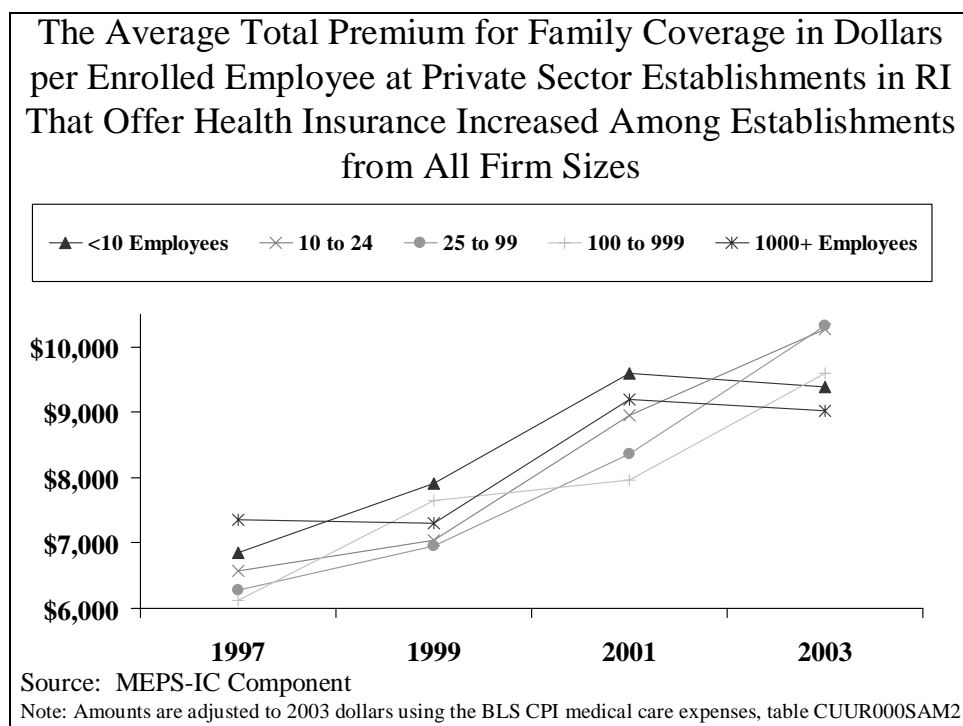
- The total premium paid by employees for single coverage increased dramatically for firms with fewer than 50 employees, but the resulting average premium payment for establishments in this group in 2003 was approximately \$100 lower than the average premium for establishments in firms with 50 or more employees.

Figure 18



- Average employee contributions toward individual coverage have increased since 1997 and in 2003 were in the 10-30% range.
- In 2003, employees in firms with 25-99 employees paid the highest percentage of the premium for individual coverage.

Figure 19



- With minimal exception, the average total family premium per enrolled employee at private sector establishments rose significantly within each firm size between 1997 and 2003 ( $p < .01$ ).
- These increases ranged from 23%, from \$7,347 to \$9,024, among establishments in firms with 1000 or more employees to 65%, from \$6,275 to \$10,325 among establishments in firms with 25-99 employees.

Table 4

**The Average Total Employee Contribution for Family Coverage in Dollars per Enrolled Employee Increased Between 1997 and 2003 at Private Sector Establishments in RI**

<b>Firm Size</b>	<b>1997</b>	<b>1999</b>	<b>2001</b>	<b>2003</b>	<b>% Increase between 1997-2003</b>
<10	\$955	\$248*	\$2,048	\$2,649	177%
10-24	\$1,376	\$2,025	\$2,137	\$2,944	114%
25-99	\$1,702	\$2,470	\$2,468	\$3,961	133%
100-999	\$1,941	\$1,787	\$1,166	\$2,481	28%
1000+	\$1,497	\$1,720	\$1,867	\$2,117	41%
<50	\$1,282	\$824*	\$2,343	\$3,161	147%
≥50	\$1,602	\$1,779	\$1,701	\$2,318	45%

Source: MEPS-IC Component

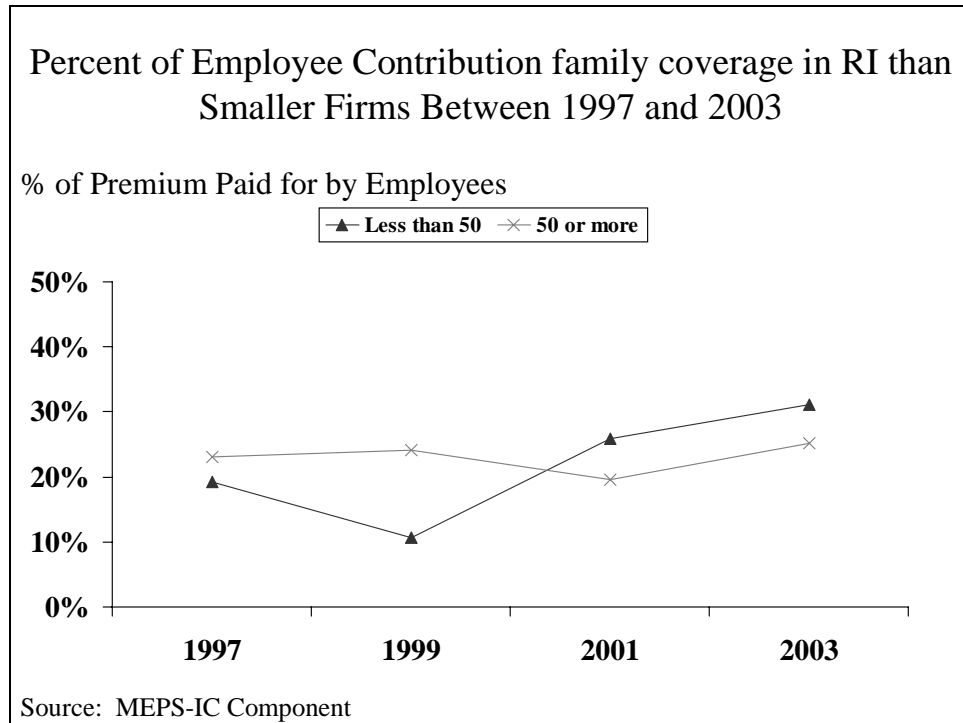
Notes: \*The estimate for <10 employees in 1999 is unstable due to large standard error.

Amounts are adjusted to 2003 dollars using the BLS CPI medical care expenses, table CUUR000SAM2

- Employee contributions for family coverage have increased dramatically for smaller firms.
- The employee premium contribution for family coverage in establishments in firms with 100 to 999 employees decreased significantly between 1997 and 2001 from \$1,941 to \$1,166 ( $p < .05$ ), but rose significantly again between 2001 and 2003 to \$2,481 ( $p < .01$ ).



Figure 20



- Since 2001, employees in smaller firms have paid a slightly higher percentage of the premium for family coverage than employees in larger firms.

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## APPENDIX 1: TABLES OF STANDARD ERRORS

### Standard Errors -- Number of Private Sector Establishments in RI by Firm Size

	1997	1999	2001	2003
Less than 10 employees	2,470	626	2,159	832
10 - 24 employees	447	364	322	479
25 - 99 employees	123	232	198	160
100-999 employees	69	158	229	252
1000 or more employees	365	353	383	681
Total	2,801	706	2,116	679

### Standard Errors -- Distribution of Employees in Private Sector Establishments in RI by Firm Size

	1997	1999	2001	2003
10 - 24 employees	2.77%	3.63%	1.56%	3.46%
25 - 99 employees	1.18%	1.91%	2.25%	1.73%
100-999 employees	1.95%	1.94%	2.44%	1.37%
1000 or more employees	1.98%	3.14%	2.85%	2.68%

### Standard Errors -- Number of Part-Time and Full-Time Employees in Private Sector Establishments in RI

	1997	1999	2001	2003
Part-Time	8,396	4,717	21,970	7,208
Full-Time	40,192	41,394	29,924	18,699
Total Employees	47,143	42,642	48,887	22,451

**Standard Errors -- Number of Part-Time Employees in Private Sector Establishments in RI**

	<b>1997</b>	<b>1999</b>	<b>2001</b>	<b>2003</b>
Less than 10 employees	2,524	1,411	2,137	4,507
10 - 24 employees	5,719	1,620	2,039	3,629
25 - 99 employees	1,403	2,495	3,383	2,465
100-999 employees	2,469	3,621	5,112	3,304
1000 or more employees	5,301	4,035	19,916	6,993
Total	8,396	4,717	21,970	7,208

**Standard Errors -- Percent of Private Sector Establishments in RI Offering Health Insurance**

	<b>1997</b>	<b>1999</b>	<b>2001</b>	<b>2003</b>
Total	3.45%	2.70%	3.53%	2.64%

**Standard Errors -- Percent of Private Sector Establishments in RI Offering Health Insurance By Firm Size**

	<b>1997</b>	<b>1999</b>	<b>2001</b>	<b>2003</b>
Less than 10 employees	3.58%	4.62%	3.71%	2.97%
10 - 24 employees	6.62%	9.93%	4.67%	5.92%
25 - 99 employees	6.71%	3.37%	4.39%	4.30%
100-999 employees	0.67%	1.58%	1.00%	0.00%
1000 or more employees	2.27%	2.10%	0.01%	0.00%
Total	3.45%	2.70%	3.53%	2.64%

**Standard Errors -- Percent of Private Sector Establishments in RI Offering Health Insurance By Wage Quartile**

	<b>2001</b>	<b>2003</b>
Quartile 1 (WAGE)	6.95%	3.73%
Quartile 2 (WAGE)	5.21%	6.21%
Quartile 3 (WAGE)	5.00%	3.52%
Quartile 4 (WAGE)	2.62%	4.82%
Total	3.53%	2.64%

**Standard Errors -- Percent of Full-Time Employees in Private Sector  
Establishments in RI That Offer Health Insurance**

	<b>1997</b>	<b>1999</b>	<b>2001</b>	<b>2003</b>
Less than 10 employees	4.30%	6.24%	4.53%	4.53%
10 - 24 employees	2.22%	12.06%	4.49%	3.39%
25 - 99 employees	1.69%	0.99%	2.85%	2.81%
100-999 employees	1.34%	1.03%	0.00%	0.00%
1000 or more employees	0.21%	1.63%	0.07%	0.00%
Total	1.64%	0.88%	0.91%	0.71%

**Standard Errors -- Percent of Full-Time Employees Eligible for Health  
Insurance in Private Sector Establishments in RI That Offer Health Insurance**

	<b>1997</b>	<b>1999</b>	<b>2001</b>	<b>2003</b>
Less than 10 employees	2.47%	3.07%	3.46%	5.85%
10 - 24 employees	4.58%	9.94%	3.59%	3.50%
25 - 99 employees	2.42%	3.27%	4.06%	1.99%
100-999 employees	3.23%	4.35%	4.81%	3.18%
1000 or more employees	2.60%	3.36%	3.84%	3.29%
Total	1.35%	2.18%	1.83%	2.51%

**Standard Errors -- Percent of Full-Time Eligibles Enrolled in Health Insurance  
in Private Sector Establishments in RI That Offer Health Insurance**

	<b>1997</b>	<b>1999</b>	<b>2001</b>	<b>2003</b>
Less than 10 employees	2.32%	3.54%	1.59%	2.85%
10 - 24 employees	6.40%	8.27%	4.19%	3.55%
25 - 99 employees	3.69%	3.88%	2.55%	3.16%
100-999 employees	2.31%	2.86%	2.45%	3.18%
1000 or more employees	2.18%	3.54%	3.78%	2.29%
Total	1.81%	2.15%	1.77%	1.05%

**Standard Errors -- Plan Options and Coverage Rules in Private Sector Establishments in RI That Offer Health Insurance**

	<b>1997</b>	<b>1999</b>	<b>2001</b>	<b>2003</b>
With waiting period	3.55%	3.03%	2.84%	3.54%
Insurance to retirees over 65	1.91%	1.68%	3.03%	2.49%
Insurance to retirees under 65	1.28%	2.42%	2.91%	1.85%
Preferred provider	2.74%	2.79%	2.17%	3.54%
Exclusive provider	3.91%	3.28%	2.94%	3.17%
Any managed care	2.74%	2.78%	2.80%	3.06%
Conventional indemnity	2.94%	3.22%	3.36%	1.83%
2 or more plans	3.47%	4.43%	2.05%	2.76%
self insure at least one plan	2.02%	1.51%	3.64%	3.46%

**Standard Errors -- Percent of Private Sector Establishments in RI That Offer Health Insurance and Required a Waiting Period By Firm Size**

	<b>1999</b>	<b>2001</b>	<b>2003</b>
Less than 50 employees	3.41%	4.29%	4.37%
50 or more employees	3.25%	3.32%	5.31%

**Standard Errors -- Percent of Private Sector Establishments in RI That Offer Health Insurance and Offer Two or More Plans By Firm Size**

	<b>1997</b>	<b>1999</b>	<b>2001</b>	<b>2003</b>
Less than 50 employees	3.61%	4.97%	1.97%	1.47%
50 or more employees	5.26%	4.65%	7.10%	8.61%

**Standard Errors -- Percent of Private Sector Establishments in RI That Offer Health Insurance and Self-Insured at Least One Plan By Firm Size**

	<b>1997</b>	<b>1999</b>	<b>2001</b>	<b>2003</b>
50 or more employees	6.81%	8.35%	11.71%	9.11%
Less than 50 employees	1.85%	2.05%	3.30%	2.59%

**Standard Errors -- Average Total Premium for Individual Coverage in Dollars per Enrolled Employee at Private Sector Establishments in RI That Offer Health Insurance By Firm Size**

	<b>1997</b>	<b>1999</b>	<b>2001</b>	<b>2003</b>
Less than 10 employees	\$97.28	\$189.83	\$112.75	\$206.86
10 - 24 employees	\$233.37	\$382.39	\$117.81	\$217.38
25 - 99 employees	\$108.02	\$92.77	\$123.05	\$184.19
100-999 employees	\$95.88	\$85.29	\$175.55	\$186.69
1000 or more employees	\$126.21	\$107.97	\$170.66	\$188.95
Less than 50 employees	\$84.35	\$369.37	\$90.19	\$140.55
50 or more employees	\$79.25	\$98.61	\$100.24	\$95.21
Total	\$64.77	\$92.94	\$88.44	\$78.33

Note: Amounts are adjusted to 2003 dollars using the BLS CPI medical care expenses, table CUUR000SAM2

**Standard Errors -- Percent of Employees That Take Single Coverage That Require No Contribution in Private Sector Establishments in RI That Offer Health Insurance By Firm Size**

	<b>1997</b>	<b>1999</b>	<b>2001</b>	<b>2003</b>
Less than 50 employees	7.76%	4.61%	4.82%	6.02%
50 or more employees	5.01%	5.16%	4.56%	3.74%

**Standard Errors -- Average Total Employee Contribution for Individual Coverage in Dollars per Enrolled Employee at Private Sector Establishments in RI That Offer Health Insurance By Firm Size**

	<b>1997</b>	<b>1999</b>	<b>2001</b>	<b>2003</b>
Less than 10 employees	\$82.19	\$100.76	\$109.00	\$127.94
10 - 24 employees	\$133.52	\$75.45	\$394.35	\$262.56
25 - 99 employees	\$73.15	\$102.43	\$60.68	\$99.95
100-999 employees	\$125.78	\$126.24	\$86.18	\$102.11
1000 or more employees	\$74.24	\$55.38	\$61.04	\$79.80
Less than 50 employees	\$59.50	\$217.65	\$75.17	\$107.51
50 or more employees	\$62.07	\$52.86	\$43.83	\$34.55
Total	\$36.14	\$40.46	\$43.81	\$28.66

Note: Amounts are adjusted to 2003 dollars using the BLS CPI medical care expenses, table CUUR000SAM2

**Standard Errors -- Percent of Total Individual Premiums Paid for By Employees per Enrolled Employee at Private Sector Establishments in RI That Offer Health Insurance By Firm Size**

	<b>1997</b>	<b>1999</b>	<b>2001</b>	<b>2003</b>
Less than 10 employees	2.67%	2.37%	2.84%	3.47%
10 - 24 employees	2.95%	2.34%	9.37%	6.87%
25 - 99 employees	2.94%	3.29%	2.23%	2.12%
100-999 employees	5.16%	3.72%	2.65%	2.55%
1000 or more employees	2.90%	2.29%	2.44%	1.72%
Less than 50 employees	1.92%	1.98%	1.80%	3.14%
50 or more employees	2.21%	1.82%	1.65%	1.12%
Total	1.35%	1.30%	1.37%	0.85%

**Standard Errors -- Average Total Premium for Family Coverage in Dollars per Enrolled Employee at Private Sector Establishments in RI That Offer Health Insurance By Firm Size**

	<b>1997</b>	<b>1999</b>	<b>2001</b>	<b>2003</b>
Less than 10 employees	\$180.29	\$352.10	\$428.92	\$323.64
10 - 24 employees	\$302.83	\$760.17	\$344.50	\$575.05
25 - 99 employees	\$90.15	\$234.30	\$174.65	\$666.30
100-999 employees	\$268.25	\$190.51	\$895.63	\$275.63
1000 or more employees	\$229.38	\$255.82	\$483.94	\$400.45
Less than 50 employees	\$147.13	\$656.73	\$261.02	\$307.81
50 or more employees	\$169.56	\$138.80	\$286.74	\$266.81
Total	\$138.00	\$120.02	\$228.62	\$227.53

Note: Amounts are adjusted to 2003 dollars using the BLS CPI medical care expenses, table CUUR000SAM2

**Standard Errors -- Percent of Employees That Take Family Coverage That Require No Contribution in Private Sector Establishments in RI That Offer Health Insurance By Firm Size**

	<b>1997</b>	<b>1999</b>	<b>2001</b>	<b>2003</b>
Less than 50 employees	7.67%	5.93%	6.72%	3.80%
50 or more employees	5.07%	4.02%	5.25%	4.66%



**Standard Errors -- Average Total Employee Contribution for Family Coverage in Dollars per Enrolled Employee at Private Sector Establishments in RI That Offer Health Insurance By Firm Size**

	<b>1997</b>	<b>1999</b>	<b>2001</b>	<b>2003</b>
Less than 10 employees	\$271.39	\$163.21	\$536.50	\$560.71
10 - 24 employees	\$356.94	\$469.02	\$483.93	\$647.50
25 - 99 employees	\$334.62	\$269.11	\$430.64	\$955.50
100-999 employees	\$369.62	\$302.87	\$335.66	\$251.62
1000 or more employees	\$217.31	\$170.48	\$323.73	\$248.82
Less than 50 employees	\$205.46	\$1,043.07	\$267.61	\$329.42
50 or more employees	\$180.69	\$133.05	\$220.27	\$217.47
Total	\$125.70	\$150.64	\$128.97	\$224.67

Note: Amounts are adjusted to 2003 dollars using the BLS CPI medical care expenses, table CUUR000SAM2

**Standard Errors -- Percent of Total Family Premiums Paid for By Employees per Enrolled Employee at Private Sector Establishments in RI That Offer Health Insurance By Firm Size**

	<b>1997</b>	<b>1999</b>	<b>2001</b>	<b>2003</b>
Less than 10 employees	3.84%	2.36%	5.13%	6.11%
10 - 24 employees	5.69%	6.79%	5.08%	8.15%
25 - 99 employees	5.58%	3.93%	5.87%	7.98%
100-999 employees	6.31%	4.12%	2.19%	3.02%
1000 or more employees	3.05%	2.57%	3.60%	2.51%
Less than 50 employees	3.11%	5.22%	2.90%	3.35%
50 or more employees	2.77%	1.88%	2.54%	2.39%
Total	1.97%	2.25%	1.48%	2.10%

## APPENDIX 2: DATA FOR SELECTED FIGURES

DATA FOR FIGURE 3: Number of Part-Time Employees in Private Sector Establishments in RI

	<b>1997</b>	<b>1999</b>	<b>2001</b>	<b>2003</b>
<b>&lt;10 Employees</b>	18,318	14,064	19,689	23,370
<b>10 to 24</b>	14,327	10,611	11,929	13,234
<b>24 to 99</b>	16,792	18,051	19,910	15,672
<b>100 to 999</b>	10,788	15,183	15,801*	18,169
<b>1000+ Employees</b>	24,944	24,241	61,041*	19,534*

\*standard errors are greater than 30%, values unstable

DATA FOR FIGURE 5: Percentage of Private Sector Establishments in RI That Offer Health Insurance

	<b>1997</b>	<b>1999</b>	<b>2001</b>	<b>2003</b>
<b>&lt;10 Employees</b>	37.3%	52.2%	43.7%	47.7%
<b>10 to 24</b>	76.7%	70.9%	83.8%	83.9%
<b>24 to 99</b>	85.8%	92.1%	92.8%	89.4%
<b>100 to 999</b>	99.1%	96.8%	98.0%	100.0%
<b>1000+ Employees</b>	97.5%	95.8%	100.0%	100.0%

DATA FOR FIGURE 7: Percent of Full-Time Employees Eligible for Health Insurance in Private Sector Establishments in RI That Offer Health Insurance

	<b>1997</b>	<b>1999</b>	<b>2001</b>	<b>2003</b>
<b>&lt;10 Employees</b>	87.6%	93.3%	86.2%	84.1%
<b>10 to 24</b>	95.1%	93.0%	91.1%	94.4%
<b>25 to 99</b>	92.3%	89.7%	86.9%	91.5%
<b>100 to 999</b>	91.7%	83.0%	80.9%	88.8%
<b>1000+ Employees</b>	93.9%	88.7%	87.3%	85.4%

DATA FOR FIGURE 17: Average Total Premium for Individual Coverage in Dollars per Enrolled Employee at Private Sector Establishments in Rhode Island That Offer Health Insurance

	<b>1997</b>	<b>1999</b>	<b>2001</b>	<b>2003</b>
<b>&lt;10 Employees</b>	\$3,101	\$3,483	\$3,711	\$3,827
<b>10 to 24</b>	\$2,885	\$3,432	\$3,543	\$4,057
<b>25 to 99</b>	\$2,842	\$3,203	\$3,633	\$3,977
<b>100 to 999</b>	\$2,670	\$3,233	\$3,136	\$4,076
<b>1000+ Employees</b>	\$2,912	\$2,505	\$3,169	\$3,315

Dollars are adjusted to 2003 levels using the Bureau of Labor Statistics Consumer Price Index for U.S. Medical Care Services, 1982-84=100, Table CUUR0000SAM2.

DATA FOR FIGURE 19: Average Total Premium for Family Coverage in Dollars per Enrolled Employee at Private Sector Establishments in Rhode Island That Offer Health Insurance

	<b>1997</b>	<b>1999</b>	<b>2001</b>	<b>2003</b>
<b>&lt;10 Employees</b>	\$6,855	\$7,907	\$9,603	\$9,395
<b>10 to 24</b>	\$6,576	\$7,045	\$8,954	\$10,282
<b>25 to 99</b>	\$6,275	\$6,960	\$8,358	\$10,325
<b>100 to 999</b>	\$6,121	\$7,659	\$7,969	\$9,593
<b>1000+ Employees</b>	\$7,347	\$7,310	\$9,198	\$9,024

Dollars are adjusted to 2003 levels using the Bureau of Labor Statistics Consumer Price Index for U.S. Medical Care Services, 1982-84=100, Table CUUR0000SAM2.